

**In the claims:**

1-62. (Canceled).

63. (New) An isolated or recombinant nucleic acid consisting of SEQ ID NO:3, or its complement.

64. (New) An isolated or recombinant nucleic acid encoding the polypeptide consisting of SEQ ID NO:4, or its complement.

65. (New) An expression vector comprising an isolated or recombinant nucleic acid of claim 63 operably linked to a promoter in the sense orientation.

66. (New) An expression vector comprising an isolated or recombinant nucleic acid of claim 64 operably linked to a promoter in the sense orientation.

67. (New) A transformed cell comprising the isolated or recombinant nucleic acid of claim 63.

68. (New) A transformed cell comprising the isolated or recombinant nucleic acid of claim 64.

69. (New) A transformed cell comprising the expression vector of claim 65.

70. (New) A transformed cell comprising the expression vector of claim 66.

71. (New) A heterologous nucleic acid comprising the isolated or recombinant nucleic acid of claim 63.

72. (New) A heterologous nucleic acid comprising the isolated or recombinant nucleic acid of claim 64.

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73. (New) A nucleic acid probe that is 10 to 20 to 30 or more contiguous nucleotides of the isolated or recombinant nucleic acid of claim 63.

74. (New) A nucleic acid probe that is 10 to 20 to 30 or more contiguous nucleotides of the isolated or recombinant nucleic acid of claim 64.

75. (New) A nucleic acid probe that is 10 to 50 or more contiguous nucleotides of the isolated or recombinant nucleic acid of claim 63.

76. (New) A nucleic acid probe that is 10 to 50 or more contiguous nucleotides of the isolated or recombinant nucleic acid of claim 64.

77. (New) A nucleic acid probe that is greater than 50 contiguous nucleotides of the isolated or recombinant nucleic acid of claim 63.

78. (New) A nucleic acid probe that is greater than 50 contiguous nucleotides of the isolated or recombinant nucleic acid of claim 64.

79. (New) A nucleic acid probe that is between about 15 to about 200 contiguous nucleotides of the isolated or recombinant nucleic acid of claim 63.

80. (New) A nucleic acid probe that is between about 15 to about 200 contiguous nucleotides of the isolated or recombinant nucleic acid of claim 64.

81. (New) A nucleic acid probe that is between about 25 to about 100 contiguous nucleotides of the isolated or recombinant nucleic acid of claim 63.

82. (New) A nucleic acid probe that is between about 25 to about 100 contiguous nucleotides of the isolated or recombinant nucleic acid of claim 64.

83. (New) A nucleic acid probe that is between about 35 to about 75 contiguous nucleotides of the isolated or recombinant nucleic acid of claim 63.

84. (New) A nucleic acid probe that is between about 35 to about 75 contiguous nucleotides of the isolated or recombinant nucleic acid of claim 64.

85. (New) A kit for detecting the presence of nucleic acid sequences associated with giant cell arteritis comprising at least one of the following:

- (a) an isolated or recombinant nucleic acid consisting of SEQ ID NO:3, or its complement;
- (b) an isolated or recombinant nucleic acid encoding the polypeptide consisting of SEQ ID NO:4, or its complement;
- (c) a nucleic acid that is 10 to 20 to 30 or more contiguous nucleotides of the isolated or recombinant nucleic acid of (a);
- (d) a nucleic acid that is 10 to 20 to 30 or more contiguous nucleotides of the isolated or recombinant nucleic acid of (b);
- (e) a nucleic acid that is 10 to 50 or more contiguous nucleotides of the isolated or recombinant nucleic acid of (a);
- (f) a nucleic acid that is 10 to 50 or more contiguous nucleotides of the isolated or recombinant nucleic acid of (b);
- (g) a nucleic acid that is greater than 50 contiguous nucleotides of the isolated or recombinant nucleic acid of (a);
- (h) a nucleic acid that is greater than 50 contiguous nucleotides of the isolated or recombinant nucleic acid of (b);
- (i) a nucleic acid that is between about 15 to about 200 contiguous nucleotides of the isolated or recombinant nucleic acid of (a);
- (j) a nucleic acid that is between about 15 to about 200 contiguous nucleotides of the isolated or recombinant nucleic acid of (b);
- (k) a nucleic acid that is between about 25 to about 100 contiguous nucleotides of the isolated or recombinant nucleic acid of (a);
- (l) a nucleic acid that is between about 25 to about 100 contiguous nucleotides of the isolated or recombinant nucleic acid of (b);
- (m) a nucleic acid that is between about 35 to about 75 contiguous nucleotides of the isolated or recombinant nucleic acid of (a) or (b).

(n) a nucleic acid that is between about 35 to about 75 contiguous nucleotides of the isolated or recombinant nucleic acid of (b), and instructional material.

86. (New) A method for diagnosing giant cell arteritis comprising providing a nucleic acid sample from an arteritis lesion biopsy, transferring the nucleic acid sample to a membrane, contacting the membrane with at least one nucleic acid probe selected from the group consisting of

- (a) an isolated or recombinant nucleic acid consisting of SEQ ID NO:3, or its complement;
- (b) an isolated or recombinant nucleic acid encoding the polypeptide consisting of SEQ ID NO:4, or its complement;
- (c) a nucleic acid that is 10 to 20 to 30 or more contiguous nucleotides of the isolated or recombinant nucleic acid of (a);
- (d) a nucleic acid that is 10 to 20 to 30 or more contiguous nucleotides of the isolated or recombinant nucleic acid of (b);
- (e) a nucleic acid that is 10 to 50 or more contiguous nucleotides of the isolated or recombinant nucleic acid of (a);
- (f) a nucleic acid that is 10 to 50 or more contiguous nucleotides of the isolated or recombinant nucleic acid of (b);
- (g) a nucleic acid that is greater than 50 contiguous nucleotides of the isolated or recombinant nucleic acid of (a);
- (h) a nucleic acid that is greater than 50 contiguous nucleotides of the isolated or recombinant nucleic acid of (b);
- (i) a nucleic acid that is between about 15 to about 200 contiguous nucleotides of the isolated or recombinant nucleic acid of (a);
- (j) a nucleic acid that is between about 15 to about 200 contiguous nucleotides of the isolated or recombinant nucleic acid of (b);
- (k) a nucleic acid that is between about 25 to about 100 contiguous nucleotides of the isolated or recombinant nucleic acid of (a);

(l) a nucleic acid that is between about 25 to about 100 contiguous nucleotides of the isolated or recombinant nucleic acid of (b);

(m) a nucleic acid that is between about 35 to about 75 contiguous nucleotides of the isolated or recombinant nucleic acid of (a); and

(n) a nucleic acid that is between about 35 to about 75 contiguous nucleotides of the isolated or recombinant nucleic acid of (b),

detecting whether the nucleic acid probe hybridizes to the nucleic acid sample on the membrane; wherein specific hybridization is diagnostic for giant cell arteritis.

87. (New) A method for diagnosing giant cell arteritis or predisposition for giant cell arteritis in a subject comprising

obtaining a nucleic acid sample from the subject,

contacting the nucleic acid sample with at least one nucleic acid probe selected from the group consisting of

- (a) an isolated or recombinant nucleic acid consisting of SEQ ID NO:3, or its complement;
- (b) an isolated or recombinant nucleic acid encoding the polypeptide consisting of SEQ ID NO:4, or its complement;
- (c) a nucleic acid that is 10 to 20 to 30 or more contiguous nucleotides of the isolated or recombinant nucleic acid of (a);
- (d) a nucleic acid that is 10 to 20 to 30 or more contiguous nucleotides of the isolated or recombinant nucleic acid of (b);
- (e) a nucleic acid that is 10 to 50 or more contiguous nucleotides of the isolated or recombinant nucleic acid of (a);
- (f) a nucleic acid that is 10 to 50 or more contiguous nucleotides of the isolated or recombinant nucleic acid of (b);
- (g) a nucleic acid that is greater than 50 contiguous nucleotides of the isolated or recombinant nucleic acid of (a);
- (h) a nucleic acid that is greater than 50 contiguous nucleotides of the isolated or recombinant nucleic acid of (b);
- (i) a nucleic acid that is between about 15 to about 200 contiguous nucleotides of the isolated or recombinant nucleic acid of (a);

- (j) a nucleic acid that is between about 15 to about 200 contiguous nucleotides of the isolated or recombinant nucleic acid of (b);
- (k) a nucleic acid that is between about 25 to about 100 contiguous nucleotides of the isolated or recombinant nucleic acid of (a);
- (l) a nucleic acid that is between about 25 to about 100 contiguous nucleotides of the isolated or recombinant nucleic acid of (b);
- (m) a nucleic acid that is between about 35 to about 75 contiguous nucleotides of the isolated or recombinant nucleic acid of (a); and
- (n) a nucleic acid that is between about 35 to about 75 contiguous nucleotides of the isolated or recombinant nucleic acid of (b),

detecting whether the nucleic acid probe hybridizes to the nucleic acid sample; wherein specific hybridization is diagnostic for giant cell arteritis or predisposition to giant cell arteritis.

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